Call 04 Electrical Repairs to the Lighting System on I-20 from SR 18 to I-55 & on I-55 from I-20 to the Rankin County Line, known as Federal Aid Project No. STBG-0020-01(283) / 108902306 in Hinds County.

Q1. **1.**) The existing pay items for branch circuits include conduit and wire. There are no pay items for wire only. Is the intent of the project to replace all conduit on project, regardless of if it is damaged or not? 1a.) If so, can the existing conduit be abandoned in place, or will it have to be removed? If it is to be removed will the cost be absorbed? **1b.**) If so, how shall the installation take place into existing pull-boxes that are cast in existing concrete maintenance pads? 1c.) If not, can pay items for wire only be added? 2.) If there are sections of existing wire that are not damaged or missing, will they be replaced anyway? 2a.) If not, will there be any required testing of the existing wire? 3.) Will the contractor be allowed to install submersible splices in pull boxes? 4.) Will the department provide a detail for the (7) proposed new Secondary Power Controllers? 5.) The drawings provided at the pre-bid meeting show "repair or replace" on some of the SPCs. If repairs can be made in lieu of replacement, how will this be paid? 6.) Will the department accept any equals to the fixtures proposed? 7.) Will the department provide a part number/requirement for the proposed LED Wall Pack Fixtures? 8.) The drawings provided at the pre-bid meeting show the replacement of knock down poles, but there is no pay item for new poles. Will a pay item be added? 9.) Given the large project area and that most of the work will not require lane closures, will the department remove the requirement for permanent construction signs on all approaches to the project and allow for temporary stand mounted signs as needed for work impacting traffic? 10.) Does the department know of any modifications to the existing high mast mounting rings be required outside of the expected hardware provided by the LED manufacturer? 10a.) If so, can the department provide a detail of the hardware/modifications? **11.**) We intend to progress through the project in a manner that would allow us to complete and energize a SPC and all connected circuits/fixtures before moving to the next location. If theft takes place on previously completed sections of the project, before the entire project is completed, does the department intend to pay the contractor to redo the work? 12.) Special Provision 907-683-1: Repair of Roadway Lighting System states for High Mast and Low Mast Poles "All existing high mast poles are to remain. All poles shall be inspected for signs of rust or corrosion. Any defects that are found shall be repaired. As a minimum the areas shall be cleaned and repainted with a zinc rich (cold galvanizing) paint to protect from further corrosion..." Does this apply to all poles on the project, or just the poles that require repairs? 12a.) If this applies to all poles on the project, will the contractor be required to clean and paint and rust spots for the full height of the high mast poles? 13.) Does the department know the condition of the existing pole foundations that are to receive replacement poles? 13a.) If not, will the department add a pay item and detail for pole foundations should one need to be replaced? 14.) Will the department add per-each pay items for replacement of missing High Mast handhole covers, Low Mast Handhole Covers, and any other hardware/parts required to be replaced. 15.) Will the contractor be required to install a new wood pole when installing the power service risers. 16.) Will the contractor be required to install new I.D. stickers on all poles in the project or just those that are missing? 17.) Will the contractor be required to megger test all new/existing circuits on the project? 18.) Will the contractor be required to replace all wire in poles/arms, and all breakaway fuse holders of all low mast assemblies

on the project? **19.**) Will the department clarify on the drawings provided at the pre-bid the following: **19a.**) Which SPCs are to be replaced/remain, by name/label? **19b.**) Are all circuits, working or not, to be replaced? **19c.**) If some circuits are to remain, can that be noted on each of those? **19d.**) If a circuit shows to be replaced and has some new wire sizes (red line/black text) and some old (original plans), shall the contractor replace all circuits or just ones with red line? **19e.**) Can any non-applicable old notes be crossed out? **19f.**) Sheet "62" states "LA numbers are incorrect per this sheet." What are the correct numbers? **19g.**) Some sheets state light fixtures shall be replaced with LED some show no notes at all. **19h.**) Sheet "31" states "Replace the knocked down poles." What type of poles are these?

1.) The intent is to replace any wire that has been or could be compromised. Conduit shall A1. be replaced as necessary during the project. 1a.) If it is determined conduit has to be replaced and it is not necessary to remove the conduit it is permitted to be capped and abandoned in place. Removal for underground conduit will be an absorbed cost. However, the pay item for removal of structure mounted has been added. 1b.) See answer to question 13, this document. 1c.) Pay items for wire only have been added. 2.) Yes. In most cases for this project if the branch circuit is missing any portion the entire wire run shall be replaced with new. Existing to remain branch circuits are noted on redlines. New and existing to remain branch circuits shall be tested. 2a.) Yes. Existing to remain branch circuits shall be tested in addition to the new branch circuits. 3.) No. The intent is to have new branch circuits or branch circuits that are existing to remain without adding in additional splices in pull boxes. 4.) Yes. The secondary power controller detail is on working number LD-2. 5.) The intent is for ALL SPC's to be replaced. Any existing contents and materials shall be returned to MDOT. Notation for this has been added to the following working numbers: L-3, L-4, L-5, L-6, L-7, L-32, L-34, L-35, L-36, and L-37. 6.) No. 7.) See addendum. 8.) Yes. There are 22 low mast poles to be replaced. See working numbers: L-6, L-7, L-34, L-35, L-36, L-37 for reference. 9.) Yes. 10.) Currently MDOT is not aware of any additional hardware requirements for the new high mast fixtures. 10a.) A detail is not required at this time. 11.) If the Contractor is directed to repair said sections. 12.) No. Just poles that require repairs. 12a.) No. 13.) Reviewed, pay items have been added and redlines have been marked. See working numbers: L-6, L-7, and L-36, for reference. 13a.) Pole foundation details are found on working numbers LD-3 and LD-4. 14.) Pay item numbers shall be provided for low mast handhole covers and high mast handhole covers. See working numbers: L-3, L-4, L-7, L-8, L-32, L-34, L-36, and L-37. 15.) Yes. See working numbers: L-4, L-5, and L-36, for reference. The new wooden poles shall be absorbed under the power service riser pay item. 16.) Yes. Contractor is responsible for following the naming convention within the redlines provided. See working number GN-1 for reference. 17.) Yes. See working number GN-1 for reference. 18.) Yes, for all lighting assemblies that do not have a branch circuit noted as existing to remain. See working number GN-1 for reference. 19.)19a.) All SPCs' shall be replaced. 19b.) Circuits that are not working shall be replaced. **19c.**) Redlines have been notated to reflect circuits that are existing to remain. 19d.) Redlines have been redone to show the circuits in red that are to be replaced. 19e.) Old notes have been crossed through or adjusted per page. 19f.) The correct pole labels are provided. See working number, L-37, for reference. 19g.) All high mast, low mast, and under pass lighting shall be replaced with LEDs. 1-1 replacement. **19h.**) See addendum.

- Q2. NTB 6066 shows a luminaire schedule with catalog numbers that reflect the use of 7-pin photocell receptacles. Is the intent of this project to also incorporate a smart node photocell system to allow use of these 7-pin receptacles?
- A2. No. This option was not selected.
- Q3. NTB Sheet #122 907-683.01-2 Repair High Mast Lowering Devices states in the section "As Indicated on the Plans" Does MDOT have a set of plans for this Project? We did not see any plans other then what was in the NTB and this was mostly traffic control sheets.
- A3. There is not a traditional set of plans for this project. A set of redlines has been provided. See addendum.
- Q4. **1.**) What amperage are the secondary power controllers? The proposal has 5 each of pay item 682-F001 Secondary Power Controller but there is no information included for the size of the controller or the location. The price for a 400A Secondary Power Controller is a lot more than a 200A Secondary Power Controller. 2.) Repair of High Mast Lowering Device. Pay item 907-683-G indicates in the proposal that we are only inspecting, cleaning, repaired, adjusted, re-leveled and re-lamped. None are shown to be replaced. Is that correct? Also, what is intended to be repaired. There are no plans indicating what is required at each of these high mast so how do we quote what is to be repaired. **3a.**) Lighting Assembly, Installation of High Mast LED Retrofit. Pay item 906-683-PP002 has the fixture quantity but not the quantity of poles that the fixtures are to be replaced at. The Pay Item on all previous LED Lighting Conversions from MDOT were listed as the following for example: 907-683-G1030 Renovation of High Mast Lighting Assembly, Type 130-8-S. This way the bidders knows how many different pole locations they will setup at to replace fixtures. Bidders need to know the total amount of poles that the 708 fixtures are being changed out on. **3b.**) The same question applies for the Lighting Assembly, Installation of Low Mast LED Retrofit. There are 170 fixtures but if the poles are double arms the pole quantity would be less. 4.) Lighting Assembly, Installation of Power Service Riser. What size conduit and wire are in these risers? This will make a lot of difference in the price. 5.) Are their any dimensions on the Pull Box Cover or Structure Mounted Covers? If not, where are these boxes located. Pricing will vary based on the box size. 6.) Lighting Assembly, Installation of Wall Pack LED Retrofit. Please provide a fixture schedule or catalog number for this fixture. 7.) Sheet Number 76 of the proposal. Traffic Control, paragraph 3. Please clarify what MDOT is expecting for "remove all debris". Is this referring to the Contractor's construction debris? If MDOT is intending on the Contractor to clean up the roadway everywhere we are working, that would be a large part of Hinds County and would be very expensive to include in a lighting repair project.
- A4. **1.**) Capacity of the SPCs is provided on the set of redlines along with additional information per each SPC installation.
 - SPC-2 (working number L-32) shall have a 200A CU bus.
 - SPC-3 (working number L-34) shall have a 200A CU bus.
 - SPC-4 (working number L-35) shall have a 200A CU bus.

- SPC-5 (working number L-36) shall have a 100A CU bus.
- SPC-6 (working number L-37) shall have a 100A CU bus.
- SPC-7 (working number L-37) shall have a 200A CU bus.
- SPC-B (working number L-3) shall have a 200A CU bus.
- SPC-C (working number L-4) shall have a 200A CU bus.
- SPC-D (working number L-5) shall have a 200A CU bus.
- SPC-E (working number L-6) shall have a 200A CU bus.
- SPC-F (working number L-7) shall have a 200A CU bus.
- SPC-A is existing to remain. SPC-J are existing to remain. Work involving these two SPCs is notated in the redlines.

2.) This pay item is intended to be used if during the High Mast LED retrofit procedure it is discovered that the lowering device for said High Mast is damaged and needs to be replaced. The set of redlines have the details regarding the high mast poles. Please see working numbers: LD-1 through LD-3 for reference. **3a.**) The pole locations are shown in the set of redlines. Each pole location identifies the number of fixtures required. High masts are represented both visually and with a chart. **3b.**) The pole locations are shown in the set of redlines. Each pole location identifies the number of fixtures required. Low masts are represented visually. **4.**) The wire size is provided on each SPC schedule. The conduit size is 3", type – rigid galvanized.

- SPC-2 (working number L-32) shall have a 1/0 THWN feeder.
- SPC-3 (working number L-34) shall have a 1/0 THWN feeder.
- SPC-4 (working number L-35) shall have a 4/0 THWN feeder.
- SPC-5 (working number L-36) shall have a #2 THWN feeder.
- SPC-6 (working number L-37) shall have a #2 THWN feeder.
- SPC-7 (working number L-37) shall have a 4/0 THWN feeder.
- SPC-B (working number L-3) shall have a 3/0 THWN feeder.
- SPC-C (working number L-4) shall have a 3/0 THWN feeder.
- SPC-D (working number L-5) shall have a 4/0 THWN feeder.
- SPC-E (working number L-6) shall have a 4/0 THWN feeder.
- SPC-F (working number L-7) shall have a 4/0 THWN feeder.
- SPC-A is existing to remain. SPC-J are existing to remain. Work involving these two SPCs is notated in the redlines.

5.) This is reflected in the updated SQS sheets. 6.) CAT#: WKP-CA2-50-740-8-GL-BK.7.) The Contractor shall be responsible for cleaning up all construction debris and all debris within their work areas.

- Q5. Can an electronic version of the redline plans be made available for download?
- A5. They can be downloaded here: <u>https://file-</u> exchange.mdot.state.ms.us/dl/?f=634c8b5f0c6c9dbd0b261a4af37f3fee49968d0b